

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 16-30 are presently active in this case. Claims 1-15 were cancelled by a Preliminary Amendment. The present Amendment amends Claims 19 without introducing any new matter or raising new issues.

The outstanding Office Action rejected Claims 16-18, and 21-29 under 35 U.S.C. § 102(b) as anticipated by Bonnefort et al. (U.S. Patent No. 5,666,836, hereinafter “Bonnefort”). Claims 19-20 and 30 were indicated as allowable if rewritten in independent form.

Applicant acknowledges with appreciation the indication of allowable subject matter. However, since Applicant believes that Claim 16, from which Claims 19-20 and 30 depend, defines patentable subject matter, Claims 19-20 and 30 are maintained in dependent form at present time.

Dependent Claim 19 is amended to recite “measuring leveling forces on at least on each side of the leveler,” to correct a minor informality so that this feature corresponds to the last line of the claim. This feature also finds non-limiting support at least in dependent Claim 21. No new matter has been added.

In response to the rejection of Claims 6-18, and 21-29 under 35 U.S.C. § 102(b), Applicant respectfully requests reconsideration of this rejection and traverses the rejection, as discussed next.

Briefly recapitulating, Claim 16 relates to a method of increasing precision in controlling a path of a product through a roller leveler. The method comprises, *inter alia*: presetting the imbrications of the rolls by using a presetting model including a reference value for presetting the imbrications; ***measuring an absolute separation value of the leveling***

rolls during leveling, and comparing the value with a reference value; and setting the position of the leveling rolls to keep the measured value equal to the reference value so as to keep the path of the product to be leveled in the leveler in accordance with an undulation of the leveled product predicted by the presetting model.

Turning now to the applied reference, Bonnefort describes a process for smoothing a metal strip having a stretcher-and-roller leveling planisher. (Bonnefort, Abstract, Fig. 1.) Bonnefort's process uses a multi-roller leveling assembly 5 including two chassis each supporting a row of parallel rollers that can be offsetted longitudinally and in height. (Bonnefort, col. 5, ll.28-44. Fig. 1, elements, 5, 50, 50', 51, 52.) Bonnefort further explains that by imbrication of the rollers an undulating feed path of the strip with reverse bendings is set. (Bonnefort, col. 2, ll. 38-41, Claim 1, ll. 8-9.)

Moreover, the position of Bonnefort's lower rollers 51' can be varied by use of the adjustment jack 64 and 66. (Bonnefort, col. 6, ll. 6-10, Fig. 1.) With adjustment jack 64, the vertical position of the lower rollers 51' can be modified. (Bonnefort, col. 5, ll. 50-54, Fig. 1.) Moreover, with adjustment jack 66, the cradle 6' that holds lower rollers 51' can be swung around the circular axis defined by tracks 65. (Bonnefort, col. 5, ll., Fig. 1.) Thereby, the horizontal orientation of the cradle 6' can change its angle relative to upper cradle 6, to change imbrication between input and output rollers. (Bonnefort, col. 5, ll. 6-11, Fig. 1.) But in Bonnefort, the upper rollers 51 cannot be adjusted.

For control purposes, Bonnefort also explains that measuring devices M1-M5 can measure positions of the jacks 36, 36a, 44, 64, and 66, and thereby a regulator is enabled to command a correction to the adjustment jacks. (Bonnefort, col. 6, ll. 25-41.) But Bonnefort has no means to measure the position of upper cradle 6, and the rollers 51, 52 that are arranged on the upper cradle 6. As explained above, Bonnefort's system can only measure the absolute position of the lower cradle 6 and its rollers 51'. However, Applicant's Claim 16

requires that, *during a leveling operation an absolute separation value* of the leveling rolls is measured. Bonnefort's system cannot measure the absolute separation value because his regulator only gets positional information from adjustable jacks 64, 66. There is nothing in Bonnefort that would allow either a direct measurement of the absolute separation value, or an indirect measurement by measuring a position of the upper cradle 6 with upper rollers 51.

In a roller leveler as described with respect to Applicant's specification in a non-limiting example, the position of the upper leveling assembly 2, the upper rolls 4, 5, and the upper portions of the support columns will not have a perfectly fixed position during a leveling operation. These elements can move and change their position when mechanical pressure is exerted on them, for example by the leveling force when processing a sheet. (Specification, p. 14, ll. 4-13, "deformations of the leveler.") Therefore, Applicant's invention as recited in independent Claim 16 proposes a solution by using absolute measurements of the separation of the upper and lower leveling rolls, and this measurement is done during the leveling operation. As shown in a non-limiting example in Fig. 1, this measurement can be done by sensors 6, 6', at the entry and exit side of the leveler. (Specification, p. 13, ll. 4-17.)

Therefore, the applied reference fails to teach every feature of Applicant's claims, so that Claim 16 is believed to be patentably distinct over Bonnefort. All remaining Claims 17-30 are also believed to be allowable by virtue of their dependency upon independent Claim 16. Accordingly, Applicant respectfully traverses, and requests reconsideration of, the rejection based on Bonnefort.¹

In addition, Applicant respectfully submits that Bonnefort fails to teach all the features of Applicant's dependent claims. For example, dependent Claim 21 is directed to an

¹ See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," (Citations omitted) (emphasis added). See also MPEP 2143.03: "All words in a claim must be considered in judging the patentability of that claim against the prior art."

installation that requires a device configured to measure leveling forces at least on each side of the leveler. Bonnefort does not describe any device for measuring *leveling forces*. In Bonnefort, measuring device M1 to M5 measure the absolute *positions* of different elements in the system, for example the screw jacks 64, 66, as discussed above. (Bonnefort, col. 6, ll. 32-41, Fig. 2.) However, no leveling forces are measured. Bonnefort merely has an anti-transversal camber device 4 that can adjust the pressure applied to the strip. (Bonnefort, col. 5, ll. 11-18, Fig. 1.) Therefore, it is apparent that Bonnefort fails to teach all the features of Applicant's dependent Claim 21, and therefore Applicant respectfully traverses the rejection, and requests reconsideration thereof.

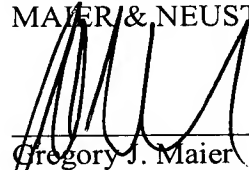
The present amendment is submitted in accordance with the provisions of 37 C.F.R. § 1.116, which after Final Rejection permits entry of amendments placing the claims in better form for consideration on appeal. As the present amendment is believed to overcome outstanding rejections under 35 U.S.C. § 102(b), the present amendment places the application in better form for consideration on appeal. In addition, the present amendment is not believed to raise new issues because the changes to Claim 19 merely corrects a minor informality. It is therefore respectfully requested that 37 C.F.R. § 1.116 be liberally construed, and that the present amendment be entered.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 16-30 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Attorney of Record
Registration No. 25,599

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)

Nikolaus P. Schibli, Ph.D.
Registered Patent Agent
Registration No. 56,994

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James J. Kulbaski
Registration Number 34,648